## Table Three: Estimated CO2 Reductions by 2020 in the State of California From Selling ACES Allowances

Total U.S. Allowance Value in ACES Cap and Trade Program									
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimated Price per ton <sup>1</sup>	\$13.00	\$13.00	\$13.00	\$13.00	\$13.60	\$14.20	\$14.80	\$15.40	\$16.00
Total Allowances <sup>2</sup>	4,627,000,000	4,544,000,000	5,099,000,000	5,003,000,000	5,482,000,000	5,375,000,000	5,269,000,000	5,162,000,000	5,056,000,000
Total Allowance Value	\$60,151,000,000	\$59,072,000,000	\$66,287,000,000	\$65,039,000,000	\$74,555,200,000	\$76,325,000,000	\$77,981,200,000	\$79,494,800,000	\$80,896,000,000
SEED Fund Allowances (to California)									
SEED Funds % of total allowances	9.50%	9.50%	9.50%	9.50%	6.50%	6.50%	5.50%	5.50%	5.50%
Total \$\$ Allocated to States	\$5,714,345,000	\$5,611,840,000	\$6,297,265,000	\$6,178,705,000	\$4,846,088,000	\$4,961,125,000	\$4,288,966,000	\$4,372,214,000	\$4,449,280,000
Total \$\$ Allocated to CA SEED(7.5%)	\$428,575,875	\$420,888,000	\$472,294,875	\$463,402,875	\$363,456,600	\$372,084,375	\$321,672,450	\$327,916,050	\$333,696,000
Total \$\$ Allocated to CA SEED, 2012-2020	\$3,503,987,100								
SEED % Allocations by Area (mall % are minimum values except Energy Efficiency - electric and gas  REEP - EE retrofits  RE Financial mechanisms  Local gov't to distribute to above categories State discretionary			Conversi Energy Efficiency, Electric	on rate of \$\$ to GHG redu annual kWh avoided/\$1: (see 6) Tons CO2/kWh: Tons CO2 avoided/\$1:	2.53 0.00037 <b>0.000937539</b>				
distribution to above categories	47.5%								
CA Energy Efficiency - (electric) Allowances	\$64,286,381	\$63,133,200	\$70,844,231	\$69,510,431	\$54,518,490	\$55,812,656	\$48,250,868	\$49,187,408	\$50,054,400
CA Total Energy Efficiency (electric) Allowance Value, 2012 - 2020	\$525,598,065								
CA Electric EE GHG reductions, 2012-2020 (MMT)	0.5								

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CA REEP - EE retrofits - Allowances	\$21,428,794	\$21,044,400	\$23,614,744	\$23,170,144	\$18,172,830	\$18,604,219	\$16,083,623	\$16,395,803	\$16,684,800
CA Total REEP Allowance Value, 2012-2020	\$175,199,355								
CA RE Financial Mechanisms allowances (required)	\$85,715,175	\$84,177,600	\$94,458,975	\$92,680,575	\$72,691,320	\$74,416,875	\$64,334,490	\$65,583,210	\$66,739,20
CA Total RE Financial Mechanisms Allowance Value, 2012-2020	\$700,797,420	\$04,177,000	ψ94,436,973	\$92,080,373	\$72,091,320	\$74,410,673	ф0 <del>4</del> ,334,490	\$00,000,210	\$00,739,20
CA Local Gov't to distribute to above categories	\$53,571,984	\$52,611,000	\$59,036,859	\$57,925,359	\$45,432,075	\$46,510,547	\$40,209,056	\$40,989,506	\$41,712,00
CA Total Local Gov't Allowance Value, 2012- 2020	\$437,998,388	\$52,011,000	\$39,030,039	ψ37,323,339	Ψ40,402,070	ψ40,510,541	Ψ40,203,030	Ψ40,303,300	ψ41,712,00
CA State Discretionary distribution to above categories	\$203,573,541	\$199,921,800	\$224,340,066	\$220,116,366	\$172,641,885	\$176,740,078	\$152,794,414	\$155,760,124	\$158,505,600
CA Total State Discretionary Allowance Value, 2012-2020	\$1,664,393,873						,		, ,

Allowances to Other Entities									
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020
Electric Utilities - Allowance % of total	43.75%	43.75%	38.89%	38.89%	35.00%	35.00%	35.00%	35.00%	35.00%
Allowance Value	\$26,316,062,500	\$25,844,000,000	\$25,779,014,300	\$25,293,667,100	\$26,094,320,000	\$26,713,750,000	\$27,293,420,000	\$27,823,180,000	\$28,313,600,000
CA allocation by formula	8.00%								
CA % of total allowances spent on GHG reductions by electric utilities <sup>3</sup>	3.50%	3.50%	3.11%	3.11%	2.80%	2.80%	2.80%	2.80%	2.80%
CA Allowance Value spent on GHG reductions	\$921,062,188	\$904,540,000	\$802,036,693	\$786,936,571	\$730,640,960	\$747,985,000	\$764,215,760	\$779,049,040	\$792,780,800
CA Total Allowance Value for Electric Utilities, 2012- 2020	\$7,229,247,011								
CA Electric Utility GHG Reductions, 2012-2020 (MMT)	6.8								
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020
Natural Gas - Allowance % of total	9%	9%	9%	9%	9%	9%	9%	9%	9%

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CA allocation by formula⁴	8%								
CA NG % of total allowances spent on Energy Efficiency (1/3 of allowances)	0.24%	0.24%	0.24%	0.24%	0.24%	0.24%	0.24%	0.24%	0.24%
CA Allowance Value	\$144,362,400	\$141,772,800	\$159,088,800	\$156,093,600	\$178,932,480	\$183,180,000	\$187,154,880	\$190,787,520	\$194,150,400
CA Total NG Allocation Value Spent on EE, 2012- 2020 <sup>5</sup>	\$1,535,522,880								

Estimates of GHG reductions from ACES Allocation money (using known conversion factors) in MMT:	7.3	Additional Money (2012-2020) from ACES Allocations to be used towards GHG reductions:	\$4,513,911,915
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## Notes:

- Linear projection from EPA estimates of \$13 in 2015 and \$16 in 2020
- <sup>2</sup> Given in ACES bill
- Currently assume 100% LDC allowances will be spent on GHG reductions. This is not possible. We are waiting for an estimate on the percentage of allowances that LDCs in CA will be able to sell vs. use for compliance. Expect estimates of GHG reductions to decrease from current value of 7.3 MMT.

- This is an estimate. We would like corroboration on what allowances CA NG entities will be receiving.
- Still need a reliable conversion factor for natural gas (heating) energy efficiency - \$/therm avoided.
- This number from PG&E. NRDC Estimates the number at 4 KWH/\$1/year